PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

A NEW CHITON FROM THE NEW ENGLAND COAST.

BY WILLIAM HEALEY DALL,

Mr. Dwight Blaney of Boston, summering at Bar Harbor, Maine, has interested himself in the marine invertebrates and engaged energetically in dredging. Among some mollusks sent to the writer for examination was a handsome chiton which, after careful study and comparison with American and North European species, appears to be undescribed.

The number of species of chiton on the New England coast is very small and, with the exception of one deep-sea species, none has been described during the last quarter century. It is therefore exceptionally interesting to know of the presence of a new species in this district. The species is somewhat intermediate in its characters between *Tonicella* and *Trachydermon*, with a leaning toward the former, and seems most nearly related to *T. marmorea* Fabricius, from which, however, it is abundantly distinct.

Tonicella blaneyi sp. nov.

Shell of a deep rose-color, with fine white lineations and reticular markings; girdle brown, apparently naked, but exhibiting under high magnification a microscopic granulation with a row of small spinules at the extreme edge, as in *T. marmorea*; the coloration of the valves outside, in the type specimen is fairly uniform but probably more or less variable among individuals; the valves inside are of a deep rose-pink, paler toward the edges; surface minutely more or less quincuncially punctate, but this is visible only when magnified; the sculpture consists of (on the midvalves usually

three) radial riblets with a tendency to bifurcate or break up into segments distally; there are no distinctly marked areas on the midvalves, but the part of the valves which bears what in many chitons are called the lateral areas, in this species carries two or three, sometimes bifurcate, thread-like ribs which are flattened above and rarely reach the mucro of the valve, being usually evanescent dorsally; there are also more or less deeply impressed lines of growth; the median part of the valves is nearly smooth except for the microscopic punctation; anterior valve semicircular, with numerous, more or less irregular, radial riblets that resemble those on the midvalves; the eaves are conspicuously spongy; the insertion plates are blunt, crenulate at the edge, but not radially striate; the anterior valve in the type has 10, but would seem normally to have either 9 or 11 slits, as one seems missing or in excess, on one side; the midvalves have one slit on each side, their anterior lamellæ are nearly continuous across the dorsal sinus; the posterior valve is small without a mucro, the incremental lines strong, the ribbing obsolete or nearly so; in the type, while there is not a posterior sinus like that of *Chætopleura*, there is a certain flattening and the insertion plates bordering this part of the valve are poorly developed; there are 7-9 slits between which the distal edges of the plates are more or less irregularly crenate; in the dried specimen the muzzle has a prominent "veil" or tegumentary margin; the ctenidia number about 15 on each side and extend forward on each side of the foot to the fourth valve; length over all (dry), 13 mm.; width, 8 mm.; dorsal angle, 120°.

Dredged in 20 fathoms off Ironbound Island, Frenchman's Bay, near Mt.

Desert Island, Maine.

From Trachydermon ruber, Tonicella marmorea and similar species, this form can be at once distinguished by the ribbing. If the type specimen be characteristic in its color, the pattern and hue would be equally distinctive. In T. ruber the girdle is pubescent and particolored, in T. marmorea and the present species it is of a uniform brown. The type specimen has been generously donated to the U. S. National Museum.